

REMARKS:

Applicants respectfully request reconsideration and withdrawal of the outstanding Office Action rejections based on the foregoing amendments and following remarks. Claims 1, 5, 6, 12, and 13 have been amended. Claim 11 has been canceled and new claim 22 has been added. No new matter has been added.

Information Disclosure Statement

With regard to the Information Disclosure Statement filed August 7, 2007, the Applicants submit that the article "Tekhologija spirta" was cited in the corresponding Russian patent application, now patent RU 2 333 961. The article was cited to show general prior art in the field of producing alcohol. Specifically, the article was cited to show that it was known to mill cereals to flour and to digest the flour for saccharification of the digested mass.

Response to Rejections under §103

Claims 1 and 3 were rejected under 35 U.S.C. §103(a) as being unpatentable over Muller (U.S. Patent 4,287,304). The Examiner cites Muller as teaching "the dry wastes of the milling station can be fed to the liquid wastes of the alcohol production to provide an animal feed." Office Action, pg 3, paragraph 7(a). The Examiner further states that Muller teaches "that liquid wastes are subjected to a drying operation to be used as animal feed." The Examiner opines that, therefore, subjecting both sources of waste – the seed coats and the vinasse – to the drying station is obvious.

Applicants submit that Muller does not disclose using dry seed coat portions as a carrier medium of a drier which dries vinasse. Further, there is no suggestion of using the vapor of the drier to heat the distillation column (analogous to rectifying column 27). Finally, there is no suggestion in Muller of how to dimension the drier with respect to the dew point temperature.

The subject matter of claim 11 has been incorporated into claim 1 and claim 11 has been canceled. As amended, the presently claimed apparatus comprises a grinding station for removing at least part of the seed coat portions of the cereal and a drying station which is fed dry seed coat portions as a carrier medium for vinasse drying. The advantages of using the claimed apparatus are that 1) the fermented mash is richer in fermentable carbohydrates and sugar improving the percentage of alcohol produced, and 2) the percentage of dried vinasse which is usually to be recirculated as a carrier material for the drying process can be decreased or omitted (see page 2, 3rd paragraph to page 3 first paragraph of the specification).

Based on the above amendments and arguments, Applicants submit that Muller does not disclose or render obvious the features of the presently claimed apparatus. Claim 3, depending from claim 1, is also believed to be non-obvious in view of Muller for at least the above reasons. Therefore, Applicants respectfully request withdrawal of the rejections.

Claims 2 and 4 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Muller in view of Dennis (U.S. Patent 3,443,958). The Examiner asserts that Dennis discloses a grinding station that separates off the seed coats in a specific ratio of seed coats to flour. Applicants submit that Dennis does not remedy the deficiencies

of Muller in rendering the presently claimed apparatus obvious. Neither Muller nor Dennis discloses using dry seed coat portions as a carrier medium of a drier which dries vinasse. Further, there is no suggestion of using the vapor of the drier to heat the distillation column (analogous to rectifying column 27). Finally, there is no disclosure of how to dimension the drier with respect to the dew point temperature. Thus, Applicants submit that no combination of Muller and Dennis discloses or renders obvious the features of the claimed apparatus. Claims 2 and 4, depending from claim 1, are believed to be non-obvious in view of Muller and Dennis for at least the above reasons. Therefore, Applicants respectfully request withdrawal of the rejections.

Claims 5-8 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Muller, in view of Reich (U.S. Patent 2,343,706). The Examiner asserts that Reich discloses an expansion cooler having a two-stage construction, a mixing condenser having a single-stage construction, and that the mixing condenser heats the product stream to a temperature below the gelatinization temperature of the raw material and the steam-jet injection heats the product stream to a temperature above the gelatinization temperature of the raw material. Applicants submit that Reich does not remedy the deficiencies of Muller in rendering the presently claimed apparatus obvious. Neither Muller nor Reich discloses using dry seed coat portions as a carrier medium of a drier which dries vinasse. Further, there is no suggestion of using the vapor of the drier to heat the distillation column (analogous to rectifying column 27). Finally, there is no disclosure of how to dimension the drier with respect to the dew point temperature. Thus, Applicants submit that no combination of Muller and Reich discloses or renders obvious the features of the claimed apparatus. Claims 5-8, depending from claim 1,

are believed to be non-obvious in view of Muller and Reich for at least the above reasons. Therefore, Applicants respectfully request withdrawal of the rejections.

Claims 9-10 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Muller in view of Prentice (U.S. Patent 4,328,317). The Examiner asserts that Prentice discloses a degassing station between fermentation and distillation stations and that the mash is preheated under pressure and heat to allow for degassing. Applicants submit that Prentice does not remedy the deficiencies of Muller in rendering the presently claimed apparatus obvious. Neither Muller nor Prentice discloses using dry seed coat portions as a carrier medium of a drier which dries vinasse. Further, there is no suggestion of using the vapor of the drier to heat the distillation column (analogous to rectifying column 27). Finally, there is no disclosure of how to dimension the drier with respect to the dew point temperature. Thus, Applicants submit that no combination of Muller and Prentice discloses or renders obvious the features of the claimed apparatus. Claims 9-10, depending from claim 1, are believed to be non-obvious in view of Muller and Prentice for at least the above reasons. Therefore, Applicants respectfully request withdrawal of the rejections.

Claims 11-15 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Muller in view of Dahlstrom (U.S. Patent 4,309,254). The Examiner asserts that Dahlstrom discloses an alcohol recovery process, an air-free exhaust vapor, a superheated steam dryer, heating arrangements for distillation columns, and a heat exchanger. Applicants submit that Dahlstrom discloses the idea to separate fiber contained in fermented mash which is produced in fermenter 12 before a liquid containing solubles is fed to the distillation column 22. The wet solid portion of the

mash and also the wet still bottoms of the evaporator 30 are fed to drier 51, the vapor stream of which is used to partially heat the distillation column 22. Dahlstrom does not disclose the idea to use dry seed coat portions as the carrier medium for vinasse drying. Further, Dahlstrom does not disclose the limitations of the dew point temperatures of the drier. Moreover, it is obvious that, in Dahlstrom, the drier does not provide nearly enough vapor to heat the distillation column 22 because the actual heating is provided by evaporators 29 which are recompressed by compressors 38 to raise the energy level of the heating vapor. Thus, Applicants submit that no combination of Muller and Dahlstrom discloses or renders obvious the features of the claimed apparatus. Claim 11 has been canceled and claims 12 and 13 have been amended to depend from claim 1. Claims 12-15, depending from claim 1, are believed to be non-obvious in view of Muller and Dahlstrom for at least the above reasons. Therefore, Applicants respectfully request withdrawal of the rejections.

Claims 16-17 were rejected under 35 U.S. C. § 103(a) as being unpatentable over Muller in view of Dahlstrom, as applied to claims 11-15 above, and further in view of Ginder (U.S. Patent 4,407,662). The Examiner asserts that Ginder discloses using a molecular sieve which is operated at a pressure of 1.7 bar or more. Applicants submit that Ginder does not remedy the deficiencies of the combination of Muller and Dahlstrom in rendering the presently claimed apparatus obvious. Muller, Dahlstrom, and Ginder do not disclose using dry seed coat portions as a carrier medium of a drier which dries vinasse. Further, there is no disclosure of how to dimension the drier with respect to the dew point temperature. Thus, Applicants submit that no combination of Muller, Dahlstrom, and Ginder discloses or renders obvious the features of the claimed

apparatus. Claims 16-17, depending from claim 1, are believed to be non-obvious in view of Muller, Dahlstrom, and Ginder for at least the above reasons. Therefore, Applicants respectfully request withdrawal of the rejections.

Claims 18-19 were rejected under 35 U.S.C. §103(a) as being unpatentable over Muller in view of Dahlstrom, and in view of Stoltenburg (U.S. Patent 3,968,739). The Examiner asserts that Stoltenburg discloses a vinasse processing apparatus for decanting and a pre- and final- evaporator. Applicants submit that Stoltenburg does not remedy the deficiencies of the combination of Muller and Dahlstrom in rendering the presently claimed apparatus obvious. Muller, Dahlstrom, and Stoltenburg do not disclose using dry seed coat portions as a carrier medium of a drier which dries vinasse. Further, there is no disclosure of how to dimension the drier with respect to the dew point temperature. Thus, Applicants submit that no combination of Muller, Dahlstrom, and Stoltenburg discloses or renders obvious the features of the claimed apparatus. Claims 18-19, depending from claim 1, are believed to be non-obvious in view of Muller, Dahlstrom, and Stoltenburg for at least the above reasons. Therefore, Applicants respectfully request withdrawal of the rejections.

Claims 20-21 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Muller in view of Dahlstrom and in view of Stoltenburg, as applied to claims 18-19 above, and further in view of Ginder. As mentioned above, neither Ginder nor Stoltenburg remedy the deficiencies of Muller in combination with Dahlstrom. None of the references discloses using dry seed coat portions as a carrier medium of a drier which dries vinasse. Further, there is no disclosure of how to dimension the drier with respect to the dew point temperature. Thus, Applicants submit that no combination of

Muller, Dahlstrom, Stoltenburg, and Ginder discloses or renders obvious the features of the claimed apparatus. Claims 20-21, depending from claim 1, are believed to be non-obvious in view of Muller, Dahlstrom, Stoltenburg, and Ginder for at least the above reasons. Therefore, Applicants respectfully request withdrawal of the rejections.

New Claims

New claim 22 has been added to define further embodiments of the invention. Support for new claim 22 can be found in claims 1 and 11 as originally filed and on page 12, lines 1-7. No new matter is added.

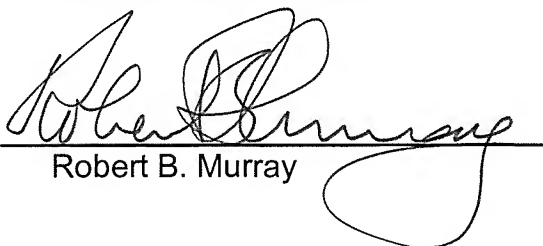
Conclusions

In view of the above amendments and remarks hereto, Applicants believe that all of the Examiner's rejections set forth in the March 10, 2009 Office Action have been fully overcome and that the present claims fully satisfy the patent statutes. Applicants, therefore, believe that the application is in condition for allowance.

The Director is authorized to charge any fees or overpayment to Deposit Account No. 02-2135.

The Examiner is invited to telephone the undersigned if it is deemed to expedite allowance of the application.

Respectfully submitted,

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